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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,821	06/25/2003	Tomokazu Ando	03500.017352.	1995

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EXAMINER	
SANTIAGO, MARICELI	
ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/602,821	ANDO, TOMOKAZU	
	Examiner	Art Unit	
	Mariceli Santiago	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 25 June 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/03, 12/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 and 6-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Ludwig et al. (US 6,722,937).

Regarding claim 1, Ludwig discloses a hermetic container (Fig. 2I) comprising a first substrate (30), a second substrate (32) disposed confronting with the first substrate (30), an outer frame (34) disposed between the first and second substrates and surrounding a space between the first and second substrates, a sealing member (34M, 34B, in Fig. 6) for sealing a connection area between the outer frame (34) and at least one of the first and second substrates (30, 32), a space defined by the first and second substrates and the outer frame being maintained hermetic (Column 10, lines 53-58), and a reinforcing member (44) disposed outside the space maintained hermetic and between the first and second substrates (30, 32), the reinforcing member maintaining a fixed state of a relative position of the first and second substrates (Column 11, lines 64-67 through Column 12, lines 1-7), wherein the reinforcing member does not contact an area (30S, 32S) at which the outer frame (34) and the sealing member (34M, 34B) contact mutually.

Regarding claim 3, Ludwig discloses a hermetic container (Fig. 2I) comprising a first substrate (30), a second substrate (32) disposed confronting with the first substrate, an outer

frame (34) disposed between said first and second substrates (30, 32) and surrounding a space between the first and second substrates, a sealing member (34) for sealing a connection area between the outer frame and at least one of the first and second substrates, a space defined by the first and second substrates and the outer frame being maintained hermetic (Column 10, lines 53-58), and a reinforcing member (44) disposed outside the space maintained hermetic, and between the first and second substrates, the reinforcing member maintaining a fixed state of a relative position of the first and second substrates (Column 11, lines 64-67 through Column 12, lines 1-7), wherein the reinforcing member does not contact an area (30S, 32S) at which at least one of the first and second substrates (30, 32) contacts the sealing member (34).

Regarding claim 6, Ludwig discloses a hermetic container wherein the sealing member is made of frit (Column 16, lines 57-59).

Regarding claim 7, Ludwig discloses a hermetic container wherein the reinforcing member is an adhesive member for adhering the first and second substrates (Column 12, lines 10-26).

Regarding claim 8, Ludwig discloses a hermetic container, although Ludwig does not explicitly teach that the reinforcing member expels a force acting to narrow a gap between the first and second substrate, it is considered that the tack component (44) taught by Ludwig would perform the same function as the claimed reinforcing member, of repelling a force acting to narrow a gap between the substrates.

Regarding claim 10, Ludwig discloses a hermetic container comprising first and second substrates (30 and 32) disposed confronting with each other, a sealing member (34) disposed in contact with each of the first and second substrates for maintaining hermetic an internal space between the first and second substrates (Column 10, lines 53-58), and a reinforcing member (44) for coupling the first and second substrates, the reinforcing member being disposed spaced

apart from a contact area (30S, 32S) between the sealing member (34) and each of the first and second substrates (32, 30).

Regarding claim 11, Ludwig discloses a hermetic container wherein the reinforcing member (44), coupling the first and second substrates, is disposed outside of said sealing member.

Regarding claim 14, Ludwig discloses a hermetic container (Fig. 2I) comprising first and second substrates (30, 32) disposed confronting with each other, an outer frame (34) disposed between the first and second substrates, a sealing member (34M, 34B, in Fig. 6) for sealing a space between one of the first and second substrates and the outer frame, the sealing member maintaining hermetic an internal space between the first and second substrates (Column 10, lines 53-58), and a reinforcing member (44) for coupling the first and second substrates (30, 32), the reinforcing member being disposed spaced apart from a contact area (30S, 32S) between the sealing member (34M, 34B) and one of the first and second substrates (30, 32).

Regarding claim 15, Ludwig discloses a hermetic container wherein the reinforcing member (44), coupling the first and second substrates, is disposed outside of said sealing member.

Regarding claim 18, Ludwig discloses a hermetic container (Fig. 2I) comprising first and second substrates (30, 32) disposed confronting with each other, an outer frame (34) disposed between the first and second substrates (30, 32), a sealing member (34B, 34M, in Fig. 6) for sealing a space between one of the first and second substrates (30, 32) and the outer frame (34), the sealing member maintaining hermetic an internal space between the first and second substrates (Column 10, lines 53-58), and a reinforcing member (44) for coupling the first and second substrates (30, 32), the reinforcing member (44) being disposed spaced apart from a contact area between the sealing member (34M, 34B) and the outer frame (34).

Regarding claim 19, Ludwig discloses a hermetic container wherein the reinforcing member (44), coupling the first and second substrates, is disposed outside of said sealing member.

Regarding claim 20, Ludwig discloses a hermetic container wherein the reinforcing member (44) coupling the first and second substrates (30, 32) is spaced apart from a contact area (30S, 32S) between the sealing member (34) and the one of the first and second substrates (30, 32).

Regarding claim 21, Ludwig discloses a hermetic container wherein the reinforcing member (44), coupling the first and second substrates, is disposed outside of said sealing member.

Regarding claims 9, 12, 13, 16, 17, 22 and 23, Ludwig discloses a hermetic container wherein one of the first and second substrates has an electron source and the other has a phosphor member for emitting light upon collision of electrons emitted from the electron source, or the container being an image display panel having image display means disposed in the hermetic container (Column 7, lines 43-67 through Column 8, lines 1-23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US 6,722,937) in view of Cho et al. (US 6,109,994).

Regarding claim 2, Ludwig discloses a hermetic container wherein the outer frame is made of ceramic and the sealing member is made of frit, accordingly the elements are considered to have different thermal expansion coefficients. While Ludwig is silent in regards to the material and coefficient of thermal expansion of the reinforcing member, in the same field of endeavor, Cho discloses a hermetic container comprising an outer frame member made of ceramic, sealing member made of frit and a reinforcing member made of aluminum oxide, thus, the individual elements having different coefficients of thermal expansion. One of ordinary skills in the art would reasonable contemplate the selection of a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to use reinforcing member material disclosed by Cho in the hermetic container of Ludwig, since the selection of known materials for a known purpose is within the skill of the art, and consequently, the reinforcing member is considered to have a different coefficients of thermal expansion than the outer frame and the sealing member.

Regarding claim 4, Ludwig discloses a hermetic container wherein the first and second substrate are made of glass and the sealing member is made of frit, accordingly the elements are considered to have different thermal expansion coefficients. While Ludwig is silent in regards to the material and coefficient of thermal expansion of the reinforcing member, in the same field of endeavor, Cho discloses a hermetic container comprising an outer frame member made of ceramic, sealing member made of frit and a reinforcing member made of aluminum oxide, thus, the individual elements having different coefficients of thermal expansion. One of ordinary skills in the art would reasonable contemplate the selection of a known material on the

basis of its suitability for the intended use as a matter of obvious design choice. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to use reinforcing member material disclosed by Cho in the hermetic container of Ludwig, since the selection of known materials for a known purpose is within the skill of the art, and consequently, the reinforcing member is considered to have a different coefficients of thermal expansion than the substrates and the sealing member.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US 6,722,937).

Regarding claim 5, Ludwig discloses a hermetic container comprising a sealing member (34M, 34B, in Fig. 6), made of frit, for sealing a connection area between the outer frame (34) and at least one of the first and second substrates, Ludwig fails to teach the use of a sealing member made of low melting point metal. However, Ludwig acknowledges the use of UV/thermal heating adhesives or a low melting point metal, such as such as suitable eutectic, solder, or braze in order to attach the spacer/tacking members to at least one of the first and second substrates (Column 16, lines 57-59). One skilled in the art would reasonable contemplate the use of either kind of materials as the sealing material for sealing a connection area between the outer frame and at least one of the first and second substrates, since the selection of a known material on the basis of its suitability for the intended use is considered within the level of skills in the art. Thus, it would have been obvious to one having ordinary skills in the art at the time the invention was made to use the sealing member made of low melting point metal, since Ludwig acknowledges the use of low melting point metal as a sealing material and the selection of known materials for a known purpose is considered within the skill of the art.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/8/05

Mariceli Santiago
Primary Examiner
Art Unit 2879